From: "Coffey, Scott" < CoffeySE@cdmsmith.com>

To: "John Kern" (b) (6)

CC: "Sheldrake, Sean" < sheldrake.sean@epa.gov>

"Zhen, Davis" <Zhen.Davis@epa.gov>

"Greazel, Andrew" < Greazel AD@cdmsmith.com>

younghs@cdmsmith.com

"Trump, Julee M." <trumpjm@cdmsmith.com>

"Silvertooth, Jason R." <silvertoothjr@cdmsmith.com>

"Blischke, Eric" <bli>chkee@cdmsmith.com>
"Gustavson, Karl" <Gustavson.Karl@epa.gov>

Date: 4/11/2018 11:43:37 AM

Subject: RE: Daily Field Report from 4/9/18 oversight of surface sediment sampling- deliberative

Thank you John!

From: John Kern (b) (6)

Sent: Wednesday, April 11, 2018 10:03 AM To: Coffey, Scott < CoffeySE@cdmsmith.com>

Cc: Sheldrake, Sean <sheldrake.sean@epa.gov>; Zhen, Davis <Zhen.Davis@epa.gov>; Greazel, Andrew

<GreazelAD@cdmsmith.com>; Young, Howard S. <younghs@cdmsmith.com>; Trump, Julee M. <trumpjm@cdmsmith.com>; Silvertooth, Jason R. <silvertoothjr@cdmsmith.com>; Blischke, Eric

Subject: Re: Daily Field Report from 4/9/18 oversight of surface sediment sampling-deliberative

From a statistical perspective,

I would recommend capturing and analyzing whatever sample can be collected at each pre-identified location. The sample thickness should be recorded for later use. If no sample can be recovered, this should also be recorded and maintained for later use. The number of attempts at a given location should also be recorded and committed to the database for later use.

Moving the sampling vessel and "hunting" for an area with thicker more easily captured sediments is fine, but when this happens we need to capture this information separately from efforts at the primary location so that this information can be tracked separately for primary targets or secondary locations.

Generally speaking we want to collect and maintain whatever sediment is recovered from the primary locations and the effort required to collect it. Secondary locations are useful, but not to the exclusion of the sample from the primary location.

John W. Kern PhD Kern Statistical Services, Inc. (b) (6)

Sauk Rapids, MN 56379 T: 320-281-0676

C: 509-432-6400

On Wed, Apr 11, 2018 at 12:37 PM, Coffey, Scott < CoffeySE@cdmsmith.com > wrote:

under 14 cm (more were in the 15 to 18 cm range), which is below the 20 cm criterion they've been working to exceed with each sample, but some locations in the current area of sampling have been difficult to meet/exceed the 20 cm criterion.

While we noted this during our oversight visit Monday, there may have been some other instances they couldn't reach 20cm penetration and decided to accept samples less than 20 cm, but greater than 10cm. We are not performing oversight every day.

Our plan is to ask Ken (Pre-RD Group representative) to identify which samples had sample composites not meeting the 20cm penetration criterion and details on reason why and what depth they did reach and the rationale for not going to the alternative location. Eric mentioned to me that there were similar penetration difficulties during RI sampling in the area they are currently sampling (RM 4 and 5) due to hardened sediment.

After we get the tally of surface sediment samples not meeting the 20 cm penetration depth, the EPA team would determine if having them resample at the alternate location would be better than accepting the less than 20cm penetration (maybe it's 15 cm) at the primary randomized sample location. I've Cc'd John Kern to get his thoughts on this.

Let me know if you agree with this plan, or have an alternate.

Scott

From: Sheldrake, Sean <sheldrake.sean@epa.gov>

Sent: Wednesday, April 11, 2018 8:23 AM

To: Coffey, Scott <CoffeySE@cdmsmith.com>; Zhen, Davis <Zhen.Davis@epa.gov>

Cc: Greazel, Andrew < GreazelAD@cdmsmith.com>; Young, Howard S. < younghs@cdmsmith.com>; Trump, Julee

M. <trumpjm@cdmsmith.com>; Silvertooth, Jason R. <silvertoothjr@cdmsmith.com>; Blischke, Eric

<bli>chkee@cdmsmith.com>; Gustavson, Karl <Gustavson.Karl@epa.gov>; Zhen, Davis <Zhen.Davis@epa.gov>

Subject: RE: Daily Field Report from 4/9/18 oversight of surface sediment sampling-deliberative

Thanks Scott.

Getting only 10cm for a surface grab is an immediate dispute issue.. not consistent with the rod nor previous protocols.

Davis, Karl, objections?

S

Sean Sheldrake RPM, Unit Diver Officer U.S. Environmental Protection Agency 1200 Sixth Avenue, Suite 155, M/S DOC-01 Seattle, WA 98101

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https://www.epa.gov/superfund/portland-harbor

From: Coffey, Scott [mailto:CoffeySE@cdmsmith.com]

Sent: Tuesday, April 10, 2018 3:59 PM

To: Sheldrake, Sean <sheldrake.sean@epa.gov>; Zhen, Davis <Zhen.Davis@epa.gov>

Cc: Greazel, Andrew < GreazelAD@cdmsmith.com>; Young, Howard S. < younghs@cdmsmith.com>; Trump, Julee

M. <trumpjm@cdmsmith.com>; Silvertooth, Jason R. <silvertoothjr@cdmsmith.com>; Blischke, Eric

dischkee@cdmsmith.com>

Subject: Daily Field Report from 4/9/18 oversight of surface sediment sampling

Sean and Davis,

Attached is the daily report for the oversight of the random stratified surface sediment sampling on Monday (4/9 /2018). Surface sediment sampling will continue through this week and we are planning to resume oversight on Wednesday (4/11/2018).

We have discovered an inconsistent criterion in the surface sediment FSP that we didn't catch earlier. The Pre-RD Group FSP has two different minimum penetration depths listed. Section 1.2 (pg 9 of PDF) lists 10 cm as the minimum penetration depth and Section 4.3 (pg 19) lists 20 cm as the minimum penetration depth. Based on past field oversight observations we are aware that they have been working to meet the 20cm minimum depth penetration, but very recently (as noted in our field notes) they collected some samples under 20cm, but above 10cm. This was noted on our field log. We will need to resolve this criterion inconsistency in the FSP with the Pre-RD Group and determine if samples collected between 10 and 20 cm are still valid, or if they need to go back and resample those locations at a contingent location.

In addition to the email we sent to AECOM/Geosyntec today regarding GPS control checks, we plan on discussing the power grab sampler penetration criterion with the Field Team Leader tomorrow (Wednesday) before work begins. Please contact me if you have any questions.

Thank you, Scott

Scott Coffey, L.Hg. Hydrogeologist

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